

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method [[Method]] of [[the]] wave biomechanotherapy using waves formed [[due to]] by a wave-type travel of an elastic medium [[presses]] pressed against a human body, *[[distinguishing itself in that the]]* the method comprising the steps of: performing a therapy [[is performed]] with a combination of heat, light and mechanical waves which are sequential and parallel combinations of longitudinal and transverse modulated solitary waves [[of]] having a length from 0.005 m to 0.1 m propagating along the human body with a speed from 0.01 m/s to 12 m/s, *[[where]]* forming the longitudinal solitary waves [[are formed]] on the human body [[due to]] as an impulsive travel of separate vibratodes along *[[the]]* a body surface, forming the transverse solitary waves [[are formed]] on the human body [[due to]] as an impulsive travel of separate vibratodes at *[[the]]* a right angle to the body surface, interconnecting the vibratodes [[are interconnected]] with a controlled link and *[[act]]* acting on *[[a]]* the human body with a temperature from *[[0]]* 0°C to 90°C, a specific pressure from $0.5 \cdot 10^5$ to $4 \cdot 10^5$ Pa, a shear thrust from 0.1 to 100 N, and a duration from 1 min to 10 hours.

2. (Currently Amended) The method [[Method]] of [[the]] wave biomechanotherapy according to Claim 1, wherein *[[as per para. 1, distinguishing itself in that the]]* modulating oscillations of a solitary wave are impulses with frequency from 0.004 Hz to 1 Hz, *[[and the]]* an on-off time ratio *[[equaling]]* equal to *[[the]]* a number of vibratodes participating in *[[the]]* a waves formation^{[[,]]} and *[[the]]* carrier oscillations are a sequence of impulses with a frequency from 1 Hz to 40 Hz and *[[the]]* an on-off time ratio from 1.1 to 6, in relation to which *[[the]]* a frequency modulation is performed, *[[for*

Serial No.: 10/623,184

example,]] including by a sinusoidal signal with the [[modulation]] frequency modulation varying from 0.004 Hz to 1 Hz and [[the]] a frequency deviation varying from 0.001 Hz to 40 Hz.

3. (Currently Amended) The method [[Method]] of [[the]] wave biomechanotherapy according to Claim 1, wherein [[as per para. 1, *distinguishing itself* in that]] each vibratode [[is equipped]] has with a radiator connected with a fiber optic light guide to [[the]] an internal laser light source with an [[the]] illumination intensity synchronized in phase with thermomechanical impulses oscillations, and all sources in total are used to create a laser light solitary wave on the body surface.

4. (Currently Amended) The method [[Method]] of [[the]] wave biomechanotherapy according to Claim 1, wherein [[as per para. 1, *distinguishing itself* in that in the process of]] therapy air of a temperature from 0°C to 90°C is supplied into the vibratodes.